### ELECTRICAL DEMOLITION NOTES

**GENERAL:** DEMOLITION DRAWINGS ARE BASED ON EXISTING PLANS AND FIELD INVESTIGATION PRIOR TO DEMOLITION. VISIT THE EXISTING BUILDING PRIOR TO BID IN ORDER TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND IN ORDER TO AVOID CONFLICTS.

**DASHED ITEMS:** ALL ITEMS SHOWN DASHED ON DEMOLITION PLANS ARE EXISTING AND SHALL BE

**SOLID ITEMS:** ALL ITEMS SHOWN SOLID ON DEMOLITION PLANS ARE EXISTING TO REMAIN.

**CIRCUITING TO REMAIN:** EXISTING CIRCUITING TO REMAIN SHALL BE REROUTED OR RECONNECTED, AS REQUIRED, WHERE AFFECTED BY NEW WORK IN ORDER TO MAINTAIN CONTINUITY OF THE CIRCUIT.

REUSE OF EXISTING CIRCUITRY: EXISTING CIRCUITRY SERVING LIGHTING FIXTURES AND/OR RECEPTACLES FOR A GIVEN AREA SHALL BE REUSED TO THE FULLEST EXTENT POSSIBLE TO SERVE THE NEW LAYOUT. PROVIDE CIRCUIT MODIFICATIONS INDICATED OR AS OTHERWISE REQUIRED TO MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT REMAIN.

**EXISTING CONDUIT:** ALL EXISTING CONDUITS AND WIRING THAT WILL NOT BE REUSED SHALL BE REMOVED WHERE THEY WILL BE EXPOSED UPON COMPLETION OF NEW WORK. EXISTING CONDUIT TO REMAIN CONCEALED IN WALLS SHALL BE ABANDONED. EXISTING CONDUIT TO REMAIN BELOW FLOOR SLAB SHALL BE CUT OFF ONE INCH BELOW ROUGH FLOOR AND GROUTED FLUSH. ALL EXISTING WIRING IN CONDUITS TO BE ABANDONED SHALL BE DISCONNECTED FROM POWER SOURCE AND REMOVED.

**REPAIR DAMAGE:** EXERCISE CARE IN REMOVAL OF DEMOLITION ITEMS. REPAIR, AT NO ADDITIONAL COST TO THE OWNER, ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND/OR EQUIPMENT TO REMAIN.

**ASSOCIATED APPURTENANCES:** REMOVE ALL ELECTRICAL APPURTENANCES (DISCONNECTS, STARTERS, WIRING, CONDUIT, ETC.) ASSOCIATED WITH EQUIPMENT TO BE REMOVED BY OTHERS.

KNOCKOUT PLUGS AND COVERS: ALL CONDUIT REMOVED SHALL BE REMOVED IN ITS ENTIRETY INCLUDING FITTINGS, MOUNTING DEVICES, MOUNTING HARDWARE, ETC. PROVIDE CONDUIT PLUGS AND BLANKS FOR ALL OPENINGS CREATED BY THE REMOVAL OF CONDUIT. PROVIDE BLANK COVER PLATES FOR ALL OPENED OUTLET BOXES CREATED BY THE REMOVAL OF EQUIPMENT AND/OR DEVICES

**<u>DEMOLISHED MATERIALS:</u>** ALL MATERIALS REMOVED UNDER DEMOLITION, NOT TO BE RELOCATED OR DESIGNATED TO BE TURNED OVER TO THE OWNER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED COMPLETELY FROM THE SITE.

SCHEDULE OUTAGES: ALL WORK AND ALL POWER OUTAGES IN THE EXISTING BUILDING SHALL BE SCHEDULED AT TIMES CONVENIENT TO THE OWNER.

**NOTIFICATION:** NOTIFY THE OWNER PRIOR TO TURNING OFF ANY CIRCUITS.

## GENERAL ELECTRICAL NOTES

**GENERAL:** UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL WORK SHOWN ON ELECTRICAL DRAWINGS IS NEW WORK TO BE PROVIDED UNDER THIS CONTRACT.

**HEALTHCARE:** THIS WILL BE A HEALTHCARE FACILITY. THE NEC ART. 517 SHALL APPLY.

**COORDINATION:** COORDINATE AND COOPERATE WITH ALL TRADES ON THE PROJECT. THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS INCLUDING CIVIL, STRUCTURAL, ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. CONTRACTOR SHALL COORDINATE AND ADJUST ACCORDINGLY AS DIRECTED BY THE ENGINEER.

**AS-BUILT DRAWINGS:** SECURE AN EXTRA SET OF ELECTRICAL DRAWINGS TO BE KEPT ON SITE AND MARK, DAILY, THE DRAWINGS IN RED AS THE PROJECT PROGRESSES IN ORDER TO KEEP AN ACCURATE RECORD OF ALL DEVIATIONS BETWEEN THE WORK SHOWN ON THE DRAWINGS AND THE WORK WHICH IS ACTUALLY INSTALLED. THESE MARKED DRAWINGS SHALL REFLECT ANY AND ALL CHANGES AND REVISIONS TO THE ORIGINAL DESIGN WHICH EXISTS IN THE COMPLETED WORK. DELIVER THE MARKED DRAWINGS TO THE ENGINEER AT PROJECT CLOSE-OUT.

**TESTS:** TEST ALL WIRING FOR CONTINUITY AND GROUNDS BEFORE CONNECTING ANY FIXTURES OR DEVICES. PERFORM INSULATION RESISTANCE TESTS ON ALL WIRING #8 OR LARGER TO INSURE THAT ALL PORTIONS ARE FREE FROM SHORT-CIRCUITS AND GROUNDS.

**INSPECTIONS:** ARRANGE ALL NECESSARY INSPECTIONS. DELIVER ALL REQUIRED INSPECTION CERTIFICATES TO THE OWNER.

**GROUNDING:** PROVIDE GROUNDING IN ACCORDANCE WITH THE NEC FOR THE ENTIRE ELECTRICAL SYSTEM INCLUDING EQUIPMENT FRAMES CONDUITS, SWITCHES, CONTROLLERS, WIRE-WAYS, NEUTRAL CONDUCTORS, AND OTHER EQUIPMENT. PROVIDE A GROUNDING CONDUCTOR IN ALL POWER CONDUITS.

**LABELS:** PROVIDE LABELS FOR ALL SWITCHBOARDS, SWITCHBOARD BREAKERS, PANELBOARDS, CABINETS, SAFETY SWITCHES MOTOR-DISCONNECT SWITCHES, AND MOTOR CONTROLLERS. LABELS SHALL BE MACHINE ENGRAVED, LAMINATED PLASTIC, PERMANENTLY ATTACHED WITH SELF-TAPPING SCREWS OR RIVETS. DO NOT USE SELF-ADHESIVE LABELS.

**J-BOX LABELING:** LABEL ALL JUNCTION BOXES WITH PERMANENT MARKER IDENTIFYING CIRCUIT NUMBER AND PANELBOARD OF CIRCUITS WITHIN.

PANEL DIRECTORY: PROVIDE TYPEWRITTEN PANELBOARD DIRECTORY CARD IN EACH PANELBOARD WITH CIRCUIT LOAD INFORMATION AND ROOM NUMBER CLEARLY IDENTIFIED. USE ACTUAL ROOM NUMBERS IN THE BUILDING, NOT THE ROOM NUMBERS SHOWN ON THE CONTRACT DRAWINGS, AS THEY ARE OFTEN DIFFERENT.

**CONDUCTORS:** IN SITUATIONS WHERE CONDUCTOR SIZES AND/OR QUANTITIES OF PARALLEL SETS HAVE BEEN INCREASED DUE TO VOLTAGE DROP OR FOR OTHER REASONS, CONTRACTOR SHALL PROVIDE THE APPROPRIATE LUG SIZES/QUANTITIES WITHIN THE EQUIPMENT CONNECTED (SWITCHBOARD, PANELBOARD, DISCONNECT SWITCH, TRANSFER SWITCH ETC.) TO PERMIT SATISFACTORY CONNECTION OF THE INDICATED CONDUCTORS. WHERE SUFFICIENT LUG SIZES AND/OR QUANTITIES CANNOT BE PROVIDED TO ACCOMMODATE THE CONDUCTORS INDICATED, THEN PROVIDE REDUCING ADAPTERS, PIN TERMINALS, OR A JUNCTION BOX TO SPLICE LARGER CONDUCTORS TO APPROPRIATELY SIZED SMALLER CONDUCTORS TO FIT INTO THE LUGS PROVIDED. ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH THE NEC.

**MOTOR COORDINATION:** MOTORS, MOTOR STARTERS, CONTROLLERS, INTEGRAL DISCONNECT SWITCHES, AND CONTACTORS SHALL BE PROVIDED WITH THEIR RESPECTIVE PIECES OF EQUIPMENT BY THE EQUIPMENT SUPPLIER. COMMUNICATE WITH THE TRADES PROVIDING THE EQUIPMENT, VERIFYING ALL REQUIREMENTS, PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED THEREIN, AND INSTALL MOTOR STARTERS.

**MOTOR DISCONNECTS:** ALL MOTORS SHALL HAVE DISCONNECTING MEANS.

**MOTOR CONTROLLERS:** ALL 3-PHASE MOTORS SHALL HAVE MAGNETIC MOTOR CONTROLLERS WITH SOLID STATE OVERLOAD RELAY PROTECTION. THE SOLID STATE OVERLOAD RELAY SHALL HAVE PHASE LOSS AND PHASE OVERCURRENT PROTECTION WITH AUTOMATIC RESET UPON RETURN OF NORMAL POWER.

MOTOR FUSE PROTECTION: WHERE FUSE PROTECTION IS SPECIFICALLY REQUIRED BY THE EQUIPMENT MANUFACTURER, PROVIDE FUSED SWITCHES IN LIEU OF NON-FUSED SWITCHES OR IN LIEU OF ENCLOSED CIRCUIT BREAKERS, OR OTHER DEVICES INDICATED.

**REDUCED VOLTAGE STARTERS:** REDUCED VOLTAGE STARTERS OR ELECTRONIC SOFT START CONTROLLERS OR VARIABLE FREQUENCY DRIVES (VFD) SHALL BE PROVIDED FOR ALL MOTORS 40HP AND LARGER AT 480 VOLTS, AND 20 HP AND LARGER AT 208 VOLTS.

**CONNECTION DETAILS:** SECURE APPROVED SHOP DRAWINGS SHOWING WIRING DIAGRAMS, ROUGH-IN AND HOOK UP DETAILS FROM OTHER INVOLVED CONTRACTORS FOR EQUIPMENT WHICH MUST BE CONNECTED ELECTRICALLY.

**COORDINATION DETAILS:** MECHANICAL EQUIPMENT WILL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. THE LOCATIONS SHOWN ON THE ELECTRICAL DRAWINGS ARE APPROXIMATE. COORDINATE WITH THE MECHANICAL CONTRACTOR TO DETERMINE THE EXACT LOCATION OF EACH PIECE OF EQUIPMENT AND DETERMINE THE EXACT ROUGH-IN AND CONNECTION REQUIREMENTS.

**WORKING CLEARANCE:** COORDINATE FINAL LOCATIONS OF ELECTRICAL EQUIPMENT WITH MECHANICAL DUCTWORK, PIPING ETC. AND ASSURE WORKING CLEARANCE REQUIRED BY NEC WILL BE MET. SUFFICIENT ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED AROUND ELECTRICAL EQUIPMENT AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF EQUIPMENT PROVIDED AND

**STARTER MOUNTING:** WHERE AN INDIVIDUALLY MOUNTED SAFETY SWITCH, STARTER OR CIRCUIT BREAKER IS SHOWN ADJACENT TO ITS RESPECTIVE LOAD AND NOT MOUNTED ON A WALL, PROVIDE ALL SUPPORTS, BRACKETS, ANCHORING, ETC. NECESSARY TO PROPERLY SUPPORT THE DEVICE.

INSTALLED BY OTHER TRADES.

**LIGHTING ARRANGEMENT:** ARRANGE LIGHTING FIXTURES IN ACCORDANCE WITH THE ARCHITECTURAL REFLECTED CEILING PLANS.

**<u>LIGHTING COORDINATION:</u>** COORDINATE LIGHTING FIXTURES WITH GRILLES. DIFFUSERS. SPRINKLER HEADS. AND ACCESS PANELS. ETC. PROVIDE FIXTURE MOUNTING BRACKETS, ACCESSORIES, PLASTER FRAMES, ETC.. SUITABLE FOR THE CEILING TYPES INDICATED ON THE ARCHITECTURAL PLANS.

**MATERIAL COORDINATION:** VERIFY CEILING AND WALL CONSTRUCTION AND MATERIAL PRIOR TO ORDERING LIGHT FIXTURES OR OTHER DEVICES TO INSURE PROPER FIXTURE OR DEVICE IS FURNISHED TO MATCH CONSTRUCTION.

**MOUNTING HEIGHTS:** MOUNTING HEIGHTS INDICATED ARE FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE WIRING DEVICE UNLESS OTHERWISE NOTED. MOUNTING HEIGHTS OF LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURE UNLESS OTHERWISE NOTED.

**<u>DEVICE LOCATIONS:</u>** COORDINATE LOCATIONS OF SWITCHES, RECEPTACLES, AND TELE/DATA OUTLETS WITH OTHER WALL MOUNTED DEVICES SUCH AS THERMOSTATS AND CONTROL STATIONS.

**EWC RECEPTACLES:** RECEPTACLES FOR ELECTRIC WATER COOLERS (EWC) SHALL BE INSTALLED OUT OF VIEW AND BEHIND THE EWC ENCLOSURE. VERIFY THE MOUNTING HEIGHT WITH THE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

**<u>DEVICE COORDINATION:</u>** THOROUGHLY REVIEW AND COORDINATE ALL CASEWORK AND CABINET DRAWINGS AND ARCHITECTURAL ELEVATIONS WITH DEVICE LOCATIONS PRIOR TO ROUGH-IN OF OUTLET BOXES.

BARRIERS: WHERE A MULTIPLE-GANG BOX HAS CIRCUITS OF DIFFERENT VOLTAGES OR SYSTEMS WHICH ARE REQUIRED TO BE SEPARATED, PROVIDE THE CODE-REQUIRED SEPARATION USING A FULL HEIGHT AND DEPTH BARRIER PLATE.

**FIRE PROOFING:** FOR ANY WALL OR FLOOR PENETRATIONS THROUGH FIRE-RATED STRUCTURES PROVIDE FIRE-PROOFING TO SEAL ALL THE PENETRATIONS AFTER THE CONDUIT HAS BEEN INSTALLED. FIRE PROOFING FOR PENETRATIONS SHALL BE UL APPROVED PER THE PENETRATION MADE IN ORDER TO MAINTAIN FIRE-RATED INTEGRITY OF THE STRUCTURE.

**CLEAN UP:** ON PROJECT CLOSE—OUT CLEAN ALL ELECTRICAL DEVICES, LIGHTING FIXTURES, LAMPS AND LENSES, AND REMOVE ALL PAINT SPATTERS FROM DEVICES, FIXTURES AND PLATES. REPLACE ALL INOPERATIVE LAMPS.

FIRE ALARM COORDINATION: THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE FIRE ALARM SYSTEM PROVIDER AND PROVIDE POWER CONNECTIONS TO ALL COMPONENTS WHETHER SHOWN OR NOT. MANUFACTURERS REQUIRE VARYING QUANTITIES OF POWER CONNECTIONS FOR EQUIPMENT LIKE EXPANDER PANELS AND POWER SUPPLIES. THESE DEVICES ARE DEPENDENT UPON THE SPECIFIC MANUFACTURERS SYSTEM. THE FIRE ALARM SYSTEM SUPPLIER SHALL NOTIFY THE OTHER APPROPRIATE SUB-CONTRACTORS ABOUT THESE REQUIREMENTS AND CONNECTION SHALL BE PROVIDED AS PART OF THE PROJECT.

HVAC DAMPERS, ETC: CONTRACTORS SHALL COORDINATE WITH THE EQUIPMENT AND SYSTEM BEING PROVIDED AND PROVIDE POWER CONNECTIONS ACCORDINGLY. THESE CONNECTIONS SHALL BE FOR FIRE/SMOKE DAMPERS, DDC CONTROL DEVICES, ETC. CONTRACTOR SHALL COORDINATE THE VOLTAGE REQUIREMENTS AND PROVIDE ALL NECESSARY CONNECTIONS, COMPONENTS, ETC. THIS INCLUDES TRANSFORMERS, BOXES, ETC.

# **ELECTRICAL LEGEND**

POWER

SWITCH, 120/277V, MOUNT 46"AFF.

CONTROL DIAGRAM ON SHEET E501.

CONTROL DIAGRAM ON SHEET E501.

AFF, UON

RECOMMENDATIONS.

SINGLE RECEPTACLE 20A, 120V, 18" AFF, UON

LIGHTING CONTROL SYSTEM MASTER STATION - REFER TO DIMMING SYSTEM

LIGHTING CONTROL SYSTEM ENTRY STATION - REFER TO DIMMING SYSTEM

DUPLEX CONVENIENCE RECEPTACLE 20A, 120V, 18" AFF, UON

TWO DUPLEX RECEPTACLES IN COMMON BOX, EACH 20A, 120V, 18"

DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING TYPE, 20A, 120V, FOR

ELECTRIC WATER COOLER. LOCATE BEHIND THE EWC PER MANUFACTURER'S

DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING TYPE, 20A, 120V,

DUAL SHADE SWITCH, 46" AFF, UON. CONNECT EACH TO SEPARATELY

MOTOR RATED SWITCH WITH THERMAL OVERLOADS 20A, 120V, UON,

CONTROL BLACK OUT SHADE AND SOLAR SHADE. REFER TO MANUFACTURE'S

46" AFF, UON (OR 6" ABOVE COUNTER AS APPLICABLE)

SPECIAL RECEPTACLE, AS NOTED ON PLANS

RECOMMENDATIONS FOR WIRING.

MOUNTED WITHIN SIGHT OF MOTOR.

SWITCH RATING <sup>2</sup>

NUMBER OF POLES—

SAFETY SWITCH, 60A-3P, FU @ 30A, 3R

FUSE RATING (NF INDICATES NON-FUSED)

NEMA ENCLOSURE IF OTHER THAN NEMA 1———

EQUIPMENT CONNECTION

JUNCTION BOX

MOTOR CONNECTION

LIGHTING **TELECOMMUNICATIONS** FLUORESCENT LIGHTING FIXTURE. SUBSCRIPT INDICATES LIGHTING FIXTURES TELE/DATA OUTLET, 18" AFF, UON, PROVIDE 1"C WITH WIRING STUBBED CONTROLLED AS A GROUP ABOVE ACCESSIBLE CEILING, OR TO CABLE TRAY OR J HOOKS AS APPLICABLE. WHERE OUTLET IS ADJACENT TO A POWER RECEPTACLE, DOWNLIGHT OR PENDANT MOUNTED FIXTURE MOUNT AT SAME ELEVATION AS POWER RECEPTACLE. UON. WALL MOUNTED LIGHTING FIXTURE TELECOMMUNICATIONS BACKBOARD -4'W x 8'H x 3/4"THICK EXIT LIGHTING FIXTURE, WITH DIRECTIONAL ARROWS AS INDICATED WITH BATTERY PACK - CONNECT AHEAD OF LOCAL SWITCH. TELECOMMUNICATIONS PANELBOARD FIRE ALARM LIGHTING FIXTURE TYPE SYMBOL. SEE LIGHTING FIXTURE DETAILS. FIRE ALARM VISUAL (STROBE) APPLIANCE, 80" AFF, OR 6" BELOW FINISHED SINGLE POLE SWITCH, 20A, 120/277V, 46" AFF UON CEILING, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM CANDELA CEILING MOUNTED DUAL TECHNOLOGY ULTRASONIC/PASSIVE INFRARED RATING OF STROBE. OCCUPANCY SENSOR. FIRE ALARM SYSTEM MAGNETIC DOOR HOLDER DEVICE. WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR WITH SINGLE POLE F**1**5 FIRE ALARM AUDIO/VISUAL (HORN/STROBE) APPLIANCE, 80" AFF, OR 6" BELOW

#### NURSE CALL SYSTEM

NURSE CALL TOILET STATION, 48" AFF WITH CORD EXTENDED WITHIN 6" OF FLOOR, UON

NURSE CALL DOME LIGHT, MOUNT SURFACE, CEILING

CANDELA RATING OF STROBE.

"R" SUBSCRIPT INDICATES RELAY BASE

FINISHED CEILING, WHICHEVER IS LOWER, UON. SUBSCRIPT INDICATES MINIMUM

FIRE ALARM SYSTEM PHOTOELECTRIC SMOKE DETECTOR, CEILING MOUNTED

MICROPHONE INPUT PLATE, PROVIDE SINGLE GANG BOX MOUNTED AT 18" AFF

#### AUDIO-VISUAL SYSTEM

CEILING MOUNT SPEAKER SUBSCRIPT DENOTES: H = HOSPITAL PA SYSTEMAV = NEW A/V SYSTEM SPEAKERVIDEO TELECONFERENCING CAMERA (PAN/TILT/ZOOM) CEILING MOUNT FELEVISION, LCD HIDEAWAY

#### **GENERAL**

NEW WORK NOTE SYMBOL DEMOLITION NOTE SYMBOL LIMIT OF DEMOLITION WORK NEW POINT OF CONNECTION

## **ABBREVIATIONS**

A AMPERE

ABOVE FINISHED FLOOR ABOVE FINISHED GRADE AHU AIR HANDLING UNIT AVAILABLE INTERRUPTING CURRENT AUTOMATIC TRANSFER SWITCH AUDIO VISUAL BELOW FINISHED GRADE CONDUIT

ACCU AIR COOLED CONDENSING UNIT

CLOSED CIRCUIT TELEVISION COMPACT FLUORESCENT LAMP CIRCUIT

CIRCUIT BREAKER DIRECT DIGITAL CONTROL

DUCTLESS SPLIT SYSTEM DOMINION VIRGINIA POWER EMERGENCY BATTERY UNIT EXISTING CONDUIT

EXHAUST FAN ETR EXISTING TO REMAIN EWC ELECTRIC WATER COOLER FHP FRACTIONAL AC HORSEPOWER

FLA FULL LOAD AMPS GROUND FAULT INTERRUPTER

GROUND HORSE POWER/HEAT PUMP KILO-VOLT-AMPERES

KW KILO-WATTS MINIMUM CIRCUIT AMPS MAIN CIRCUIT BREAKER

MOUNTED NATIONAL ELECTRICAL CODE NON-FUSED

MAIN LUGS ONLY

POLE PCP PUMP CONTROL PANEL PF POWER FACTOR

ø PHASE TBB TELEPHONE BACKBOARD TRT TRIPLE TUBE FLUORESCENT LAMP

V VOLT(S) VAV VARIABLE AIR VOLUME

VFD VARIABLE FREQUENCY DRIVE W WATTS/WIRE WP WEATHERPROOF

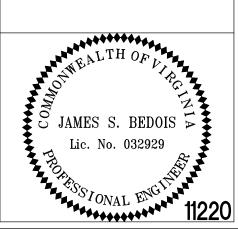
AND

ELECTRICAL PANELBOARD ELECTRICAL CIRCUIT RUN IN CONDUIT AND CIRCUIT HOMERUN TO PANELBOARD (PANEL AND CIRCUIT DESIGNATION AS INDICATED). AS A MINIMUM CONDITION, EACH SINGLE PHASE CIRCUIT SHALL HAVE 1 #12 PHASE CONDUCTOR. 1 #12 NEUTRAL CONDUCTOR AND 1 #12 GROUNDING CONDUCTOR IN 1/2" CONDUIT. PROVIDE ADDITIONAL PHASE CONDUCTORS AS REQUIRED FOR "MULTIPLE PHASED" ELECTRICAL LOADS. PROVIDE NEUTRAL CONDUCTOR TO ALL WALL SWITCH OUTLET BOXES WHETHER REQUIRED OR NOT. PROVIDE ADDITIONAL "SWITCH LEG" CONDUCTORS TO PROVIDE THE LIGHT FIXTURE CONTROL INDICATED. MULTIPLE SINGLE PHASE CONDUCTORS MAY BE GROUPED TOGETHER IN A COMMON CONDUIT IN ACCORDANCE WITH THE NEC AND AT THE CONTRACTOR'S DISCRETION. GROUNDING CONDUCTORS MAY BE SHARED AS ALLOWED BY THE NEC. NEUTRAL CONDUCTORS SHALL NOT BE SHARED. MULTI-POLE BREAKERS SHALL BE PROVIDED IN ACCORDANCE WITH THE NEC SHOULD MULTI-WIRE BRANCH CIRCUITS BE INSTALLED. CONDUIT LARGER THAN 1/2" AND CONDUCTORS LARGER THAN #12 SHALL BE AS INDICATED.

9 eignth linch - Olic 1000.

4 8 16





ARCHITECT:





Approved: Project Director

VETERAN'S ADMINISTRATION HOSPITAL - HIGH TECH CONFERENCE ROOM RENOVATION FAYETTEVILLE, NORTH CAROLINA

Checked

GML

Drawn

Project Number 565-11-101 **Building Number** 

Office of Construction and Facilities Management

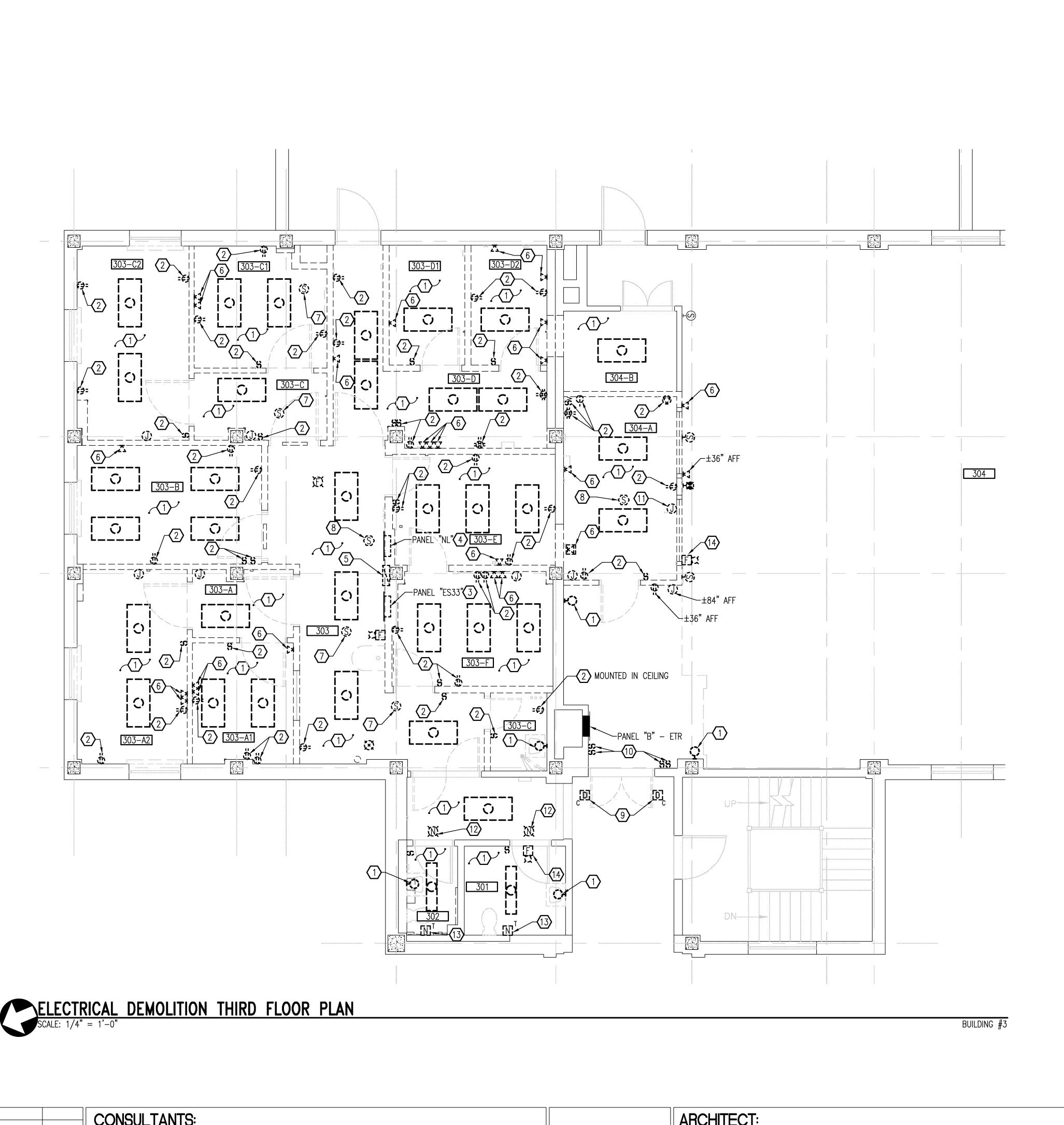
Veterans Affairs

VA FORM 08-6231

05 - 14 - 12

Project Title

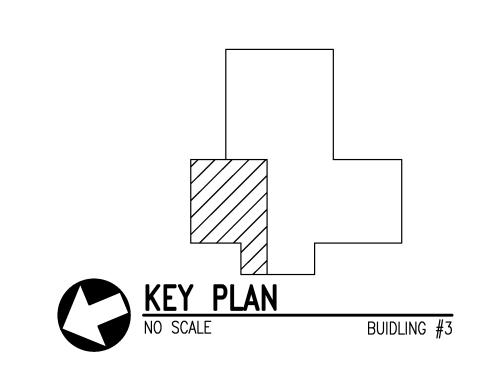
TKH Dwg. 29 of 36



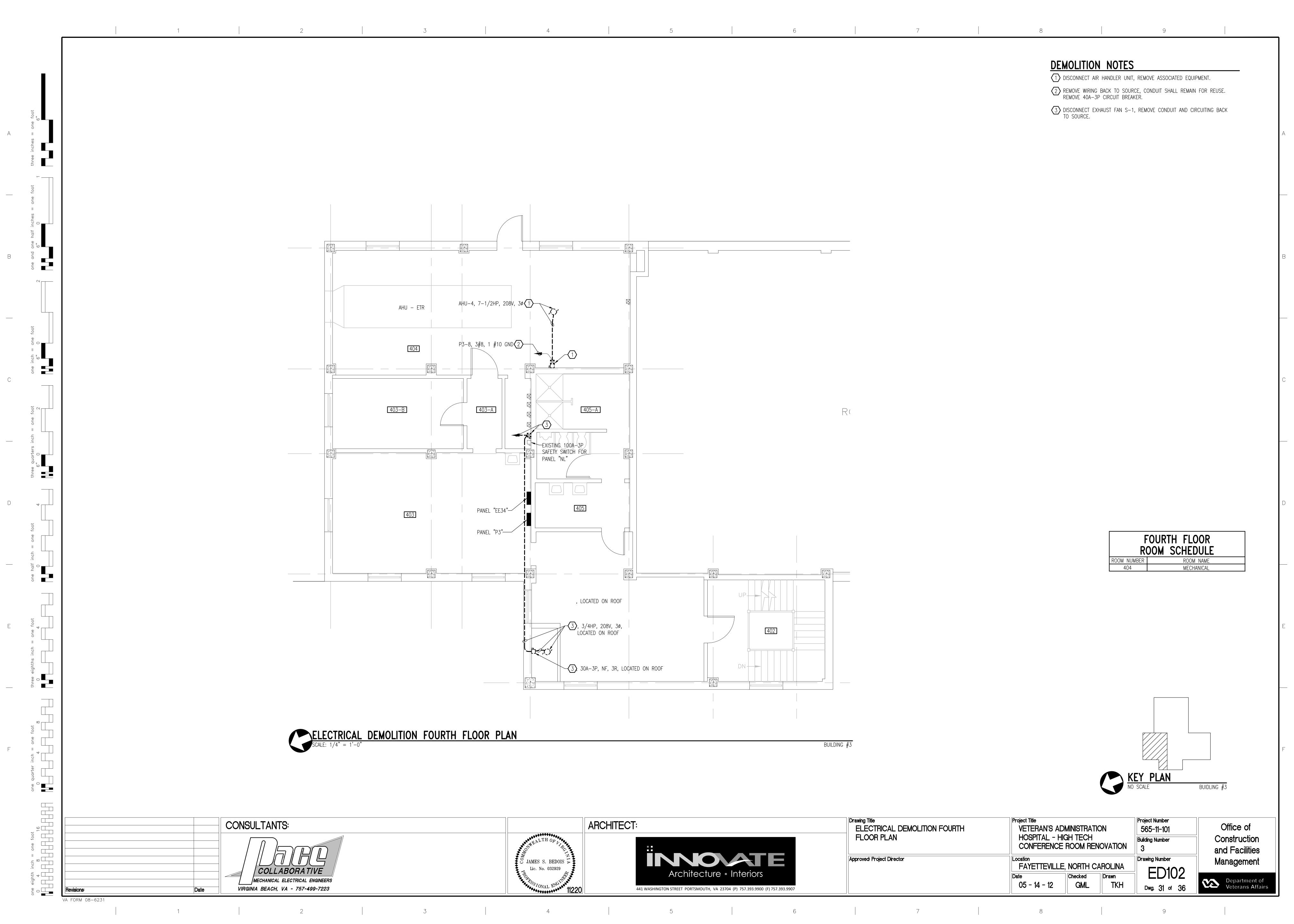
NOTES THIS SHEET

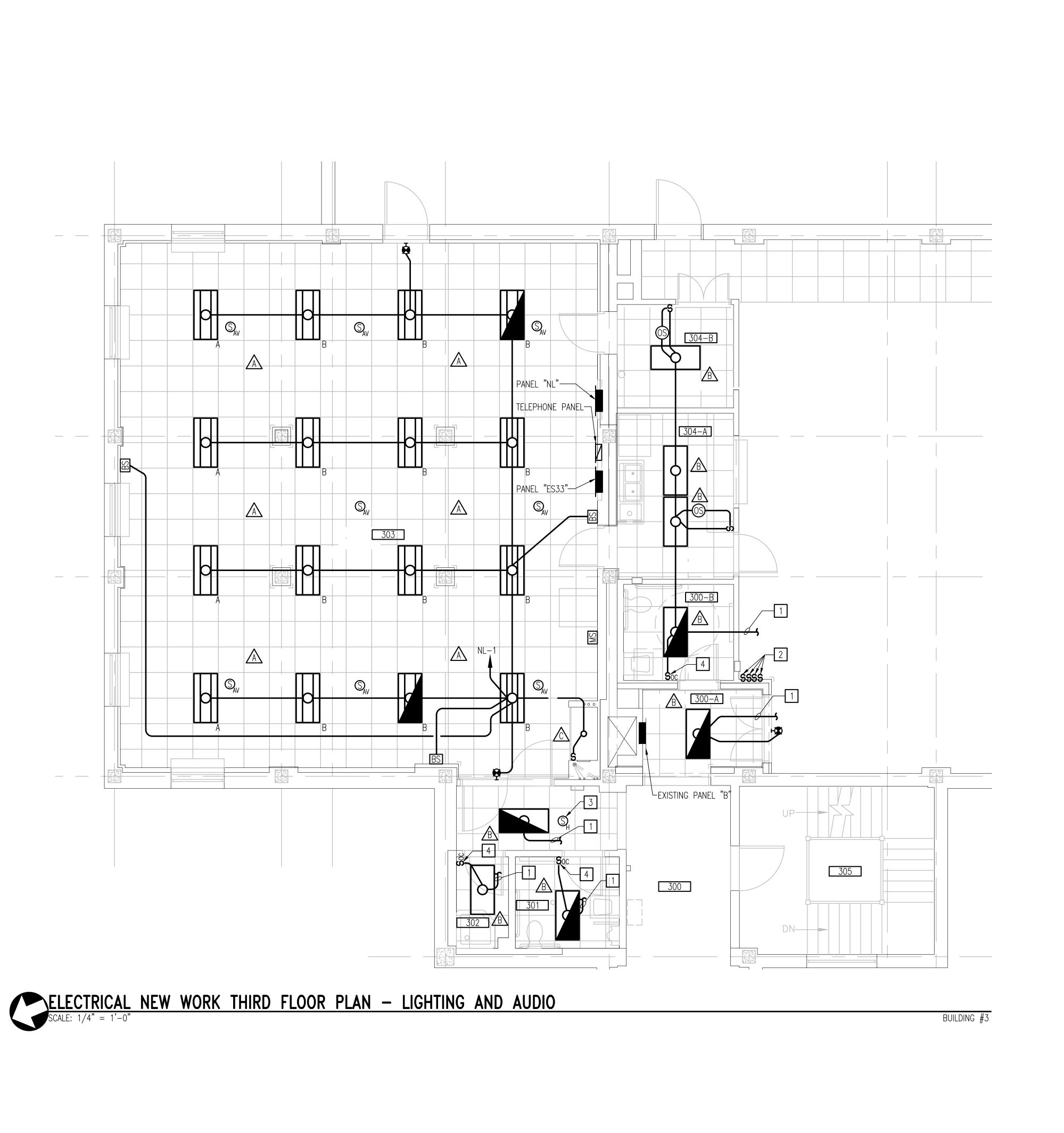
- DISCONNECT LIGHTING FIXTURES. REMOVE CONDUIT AND CONDUCTORS BACK TO NEAREST JUNCTION BOX TO REMAIN, ABOVE CEILING. RETAIN CIRCUIT FOR REUSE.
- 2 REMOVE DEVICE, CONDUIT AND CONDUCTORS BACK TO SOURCE.
- REMOVE PANEL "ES33". REMOVE PANEL FEEDER AND BRANCH CIRCUITS TO REMAIN BACK TO ABOVE ACCESSIBLE CEILING. RETAIN PANEL AND CIRCUIT BREAKERS FOR REINSTALLATION. SEE SHEET E601 FOR CIRCUIT INFO.
- REMOVE PANEL "NL". REMOVE PANEL FEEDER BACK TO SAFETY SWITCH, LOCATED IN MECHANICAL ROOM 404. SEE SHEET E601 FOR CIRCUIT INFO.
- PRIOR TO REMOVING TELEPHONE PUCHDOWN BLOCKS, A QUALIFIED CONTRACTOR SHALL TEST EACH TERMINATION AND REPORT ANY THAT DO NOT WORK. ONCE THE TEST HAS BEEN COMPLETED THEN THE QUALIFIED CONTRACTOR SHALL LABEL EACH WIRES POSITION, COIL THE WIRING TO ABOVE CEILING AND PROTECT FROM DEMOLITION FOR REUSE.
- REMOVE TELE/DATA DEVICE, CAREFULLY DISCONNECT WIRING, COIL TO ABOVE CEILING AND PROTECT FROM DEMOLITION FOR REUSE.
- 7 REMOVE SPEAKER, CLEAN AND STORE, CONNECT CABLING THROUGH AND TAPE UP, COIL WIRING TO ABOVE CEILING, SUPPORT AND PROTECT FROM DEMOLITION.
- 8 REMOVE SMOKE DETECTOR, COIL WIRING TO ABOVE CEILING, SUPPORT AND PROTECT FROM DEMOLITION.
- PREMOVE MAGNETIC DOOR HOLDER CIRCUIT TO BELOW FLOOR. RETAIN CIRCUIT FOR REUSE.
- REMOVE EXISTING SWITCH, CONDUIT, AND CONDUCTORS TO ABOVE NEW DROP CEILING ELEVATIONS, ±9'. RETAIN CIRCUITS FOR REUSE.
- (11) REMOVE JUNCTION BOX, COIL MIC CABLE TO ABOVE CEILING.
- DISCONNECT NURSE CALL LIGHT, RETAIN FIXTURE AND WIRING FOR REUSE.
- REMOVE NURSE CALL STATION, RETAIN CIRCUITING FOR REUSE. SEE NEW WORK PLANS FOR REVISED LOCATION.
- DISCONNECT FIRE ALARM HORN/STROBE, RETAIN FIXTURE AND WIRING FOR REUSE.

THIRD FLOOR DEMOLITION ROOM SCHEDULE					
300	CORRIDOR				
301	MALE TOILET				
302	FEMALE TOILET				
303	SOCIAL WORK SVC				
303-A	ENTRY				
303-A1	ADMIN OFFICE				
303-A2	CHIEF SWS OFFICE				
303-B	SOCIAL WORK OFFICE				
303-C	ENTRY				
303-C1	SOCIAL WORK OFFICE				
303-C2	SOCIAL WORK OFFICE				
303-D	CORRIDOR				
303-D1	SOCIAL WORK OFFICE				
303-D2	SOCIAL WORK OFFICE				
303-E	INTERNS				
303-F	SOCIAL WORK OFFICE				
303-G	HOUSE KEEPING				
304	AUDITORIUM				
304-A	KITCHEN				
304-B	STORAGE				
304-C	STORAGE				
304-D	STAGE				
305	STAIR				



CONSULTANTS:		ARCHITECT:	Drawing Title ELECTRICAL DEMOLITION	VETERAN'S ADMINISTRATION	Project Number 565-11-101	Office of
COLLABORATIVE	JAMES S. BEDOIS Lic. No. 032929	Architecture • Interiors	THIRD FLOOR PLAN  Approved: Project Director	CONFERENCE ROOM RENOVATION	Building Number 3  Drawing Number  ED101	Construction and Facilities Management
Revisions:  Date    MECHANICAL ELECTRICAL ENGINEERS   VIRGINIA BEACH, VA - 757-499-7223	11220	441 WASHINGTON STREET PORTSMOUTH, VA 23704 (P) 757.393.9900 (F) 757.393.9907		05 - 14 - 12 GML TKH	Dwg. 30 of 36	Department of Veterans Affairs





VA FORM 08-6231

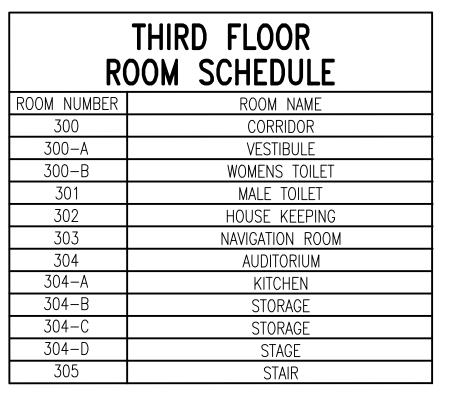
## NEW WORK NOTES

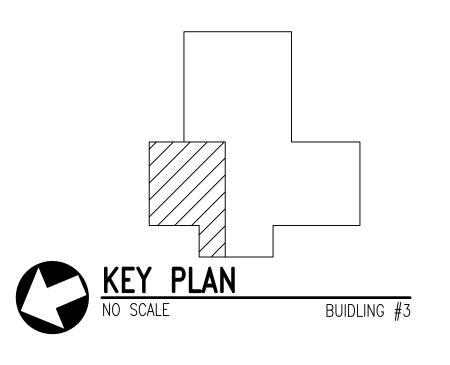
1 CONNECT TO EXISTING LIGHTING CIRCUIT MADE AVAILABLE BY DEMOLITION.

2 EXTEND CIRCUIT FROM LIMIT OF DEMOLITION TO NEW LOCATION SHOWN.

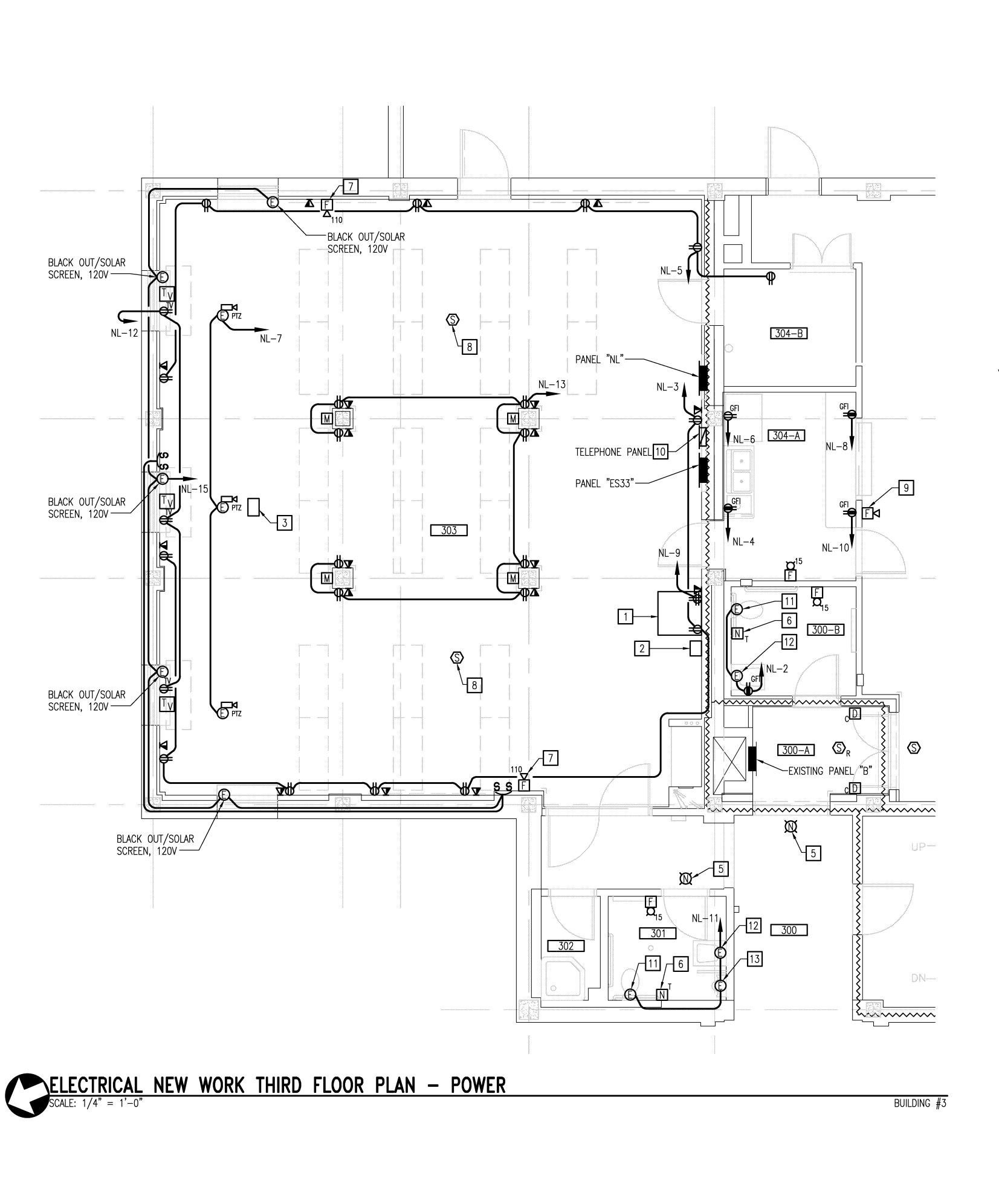
INSTALL HOSPITAL PAGING SYSTEM SPEAKER RETAINED DURING DEMOLITION. EXTEND WIRING AS NECESSARY TO REVISED LOCATION.

4 MOUNT TOP OF SWITCH FLUSH WITH TOP OF WALL MOUNTED TILE.





Project Title
VETERAN'S ADMINISTRATION
HOSPITAL - HIGH TECH
CONFERENCE ROOM RENOVATION Drawing Title
ELECTRICAL NEW WORK THIRD
FLOOR PLAN - LIGHTING AND AUDIO Project Number CONSULTANTS: ARCHITECT: Office of 565-11-101 Construction Building Number and Facilities Approved: Project Director Location
FAYETTEVILLE, NORTH CAROLINA Management ES101 Architecture • Interiors MECHANICAL ELECTRICAL ENGINEERS Department of Veterans Affairs TKH 05 - 14 - 12 GML Dwg. 32 of 36 VIRGINIA BEACH, VA - 757-499-7223 441 WASHINGTON STREET PORTSMOUTH, VA 23704 (P) 757.393.9900 (F) 757.393.9907



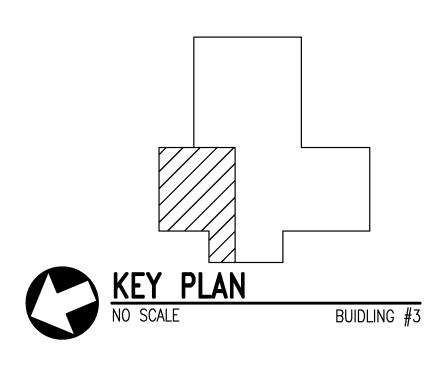
----- REAR DOOR FANS FAN ---- FRONT PLEXIGLASS MATRIX SWITCHER **AMPLIFIER** CONTROL PROCESSOR CODEC (VTC) DVD PLAYER BLU-RAY PLAYER 54 1/2" SCALER/SWITCHER PROVIDE MIDDLE ATLANTIC SLIM 5 SERIES EQUIPMENT RACK ENCLOSURE MODEL #5-29-26 WITH DARK CHERRY
THERMOLANMINATE SIDE AND TOP AND TOP FAN KIT WITH (2) FANS AND (4) GRILLES. ENSURE ADÉQUATE SPACE IS PROVIDED IN BETWEEN COMPONENTS FOR ADEQUATE TOP AND BOTTOM AIRFLOW.

A/V CONTROL CONSOLE ELEVATION PLAN
NO SCALE

# **NEW WORK NOTES**

- AUDIO-VISUAL CONTROL CONSOLE LOCATION PROVIDE WITH FRONT AND REAR ACCESS DOORS. SEE DETAIL THIS SHEET.
- 2 PORTABLE A/V SYSTEM WALL DOCKING STATION.
- 3 PODIUM WITH A/V DOCKING STATION, COMPUTER INTERFACE, AND MICROPHONE. COORDINATE INSTALLATION OF EQUIPMENT WITH PODIUM PROVIDER. VA FURNISHED AND CONTRACTOR INSTALLED PODIUM. PODIUM SHALL BE PROVIDED WITH A/V DOCKING STATION, COMPUTER INTERFACE, AND MICROPHONE. VA PODIUM PROVIDER SHALL COORDINATE WITH GENERAL CONTRACTOR WITH ALL A/V EQUIPMENT. PODIUM PROVIDER SHALL FURNISH PODIUM WITH ALL INTERFACE AND DOCKING EQUIPMENT LISTED.
- 4 MOUNT TOP OF RECEPTACLE FLUSH WITH TOP OF WALL MOUNTED TILE.
- 5 INSTALL NURSE CALL LIGHT FIXTURE RETAINED DURING DEMOLITION. EXTEND WIRING AS
- 6 PROVIDE SYSTEM COMPATIBLE EMERGENCY NURSE CALL PULL STATION, CONNECT TO NURSE CALL CIRCUIT RETAINED FROM DEMOLITION, EXTEND CIRCUITING AS REQUIRED.
- 7 PROVIDE SYSTEM COMPATIBLE FIRE ALARM HORN/STROBE. PROVIDE WIRING PER MANUFACTURER'S INSTRUCTIONS IN 3/4"C MINIMUM. CONTRACTOR SHALL DETERMINE QUANTITY AND SIZE OF ENCLOSURE AND JUNCTION BOXES TO COMPLY WITH MANUFACTURER'S RECOMMENDED INSTALLATION REQUIREMENTS. DO NOT LOAD ANY CIRCUIT BEYOND 80% OF RATED CAPACITY. ADD ADDITIONAL CIRCUITS AS NECESSARY. PROVIDE NOTIFICATION EXTENDER PANELS, POWER SUPPLIES, ETC. AS REQUIRED. FIRE ALARM TRANSPONDER FOR THIS BUILDING IS LOCATED IN THE BASEMENT EQUIPMENT ROOM. SYSTEM IS AS EST ADDRESSABLE SYSTEM.
- 8 INSTALL SMOKE DETECTOR RETAINED DURING DEMOLITION. EXTEND WIRING AS REQUIRED.
- 9 INSTALL FIRE ALARM HORN/STROBE RETAINED DURING DEMOLITION. EXTEND WIRING AS REQUIRED.
- 10 INSTALL TELEPHONE PANEL AND EXTEND WIRING AS REQUIRED RETAINED DURING DEMOLITION.
- 11 INFRARED WATER CLOSET CONTROL CONNECTION. COORDINATE EXACT MOUNTING LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH—IN.
- 12 INFRARED LAVATORY CONTROL CONNECTION. COORDINATE EXACT MOUNTING LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH—IN.
- 13 INFRARED URINAL CONTROL CONNECTION. COORDINATE EXACT MOUNTING LOCATION WITH PLUMBING CONTRACTOR PRIOR TO ROUGH—IN.

THIRD FLOOR ROOM SCHEDULE						
ROOM NUMBER	ROOM NAME					
300	CORRIDOR					
300-A	VESTIBULE					
300-B	WOMENS TOILET					
301	MALE TOILET					
302	HOUSE KEEPING					
303	NAVIGATION ROOM					
304	AUDITORIUM					
304-A	KITCHEN					
304-B	STORAGE					
304-C	STORAGE					
304-D	STAGE					
305	STAIR					

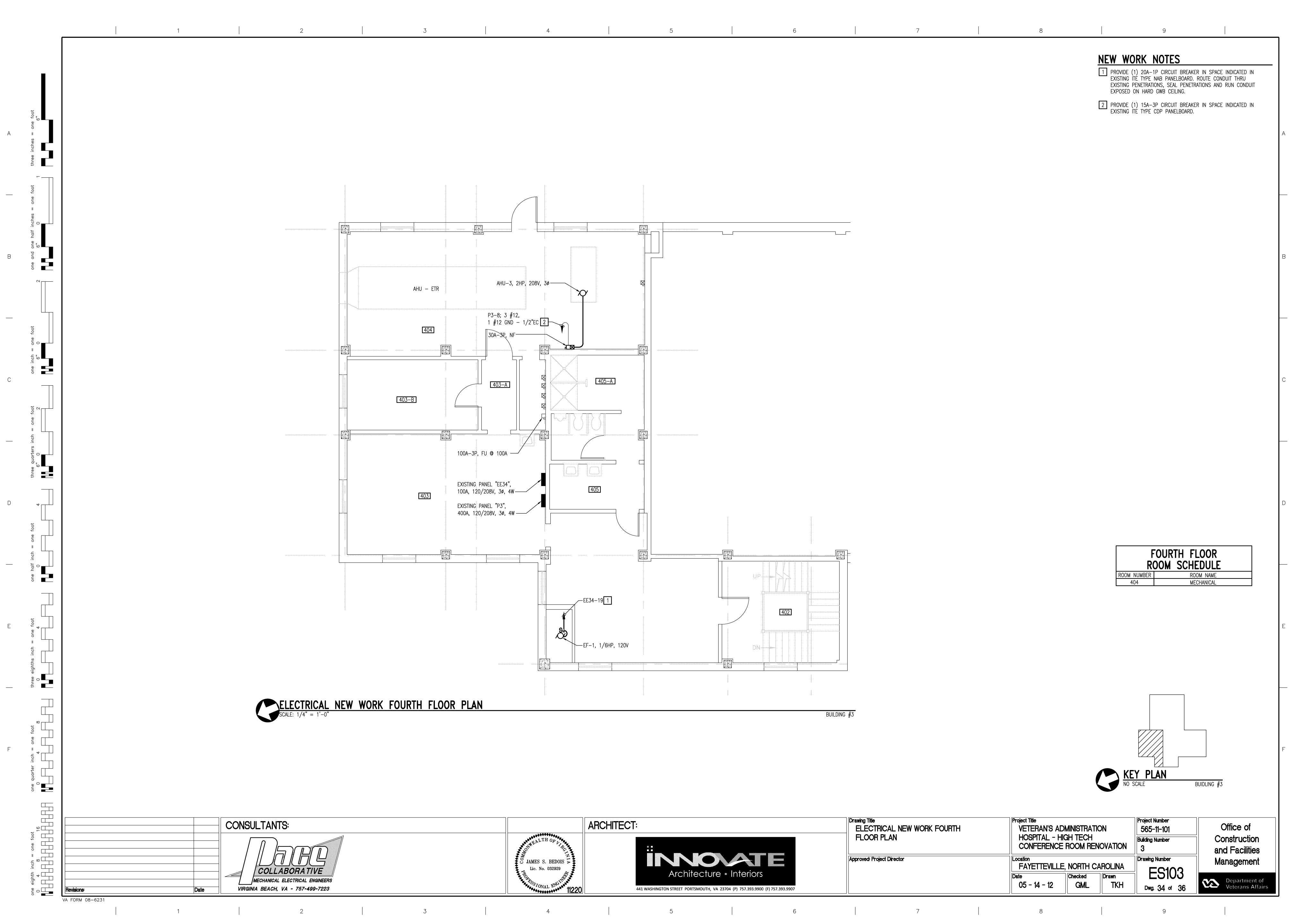


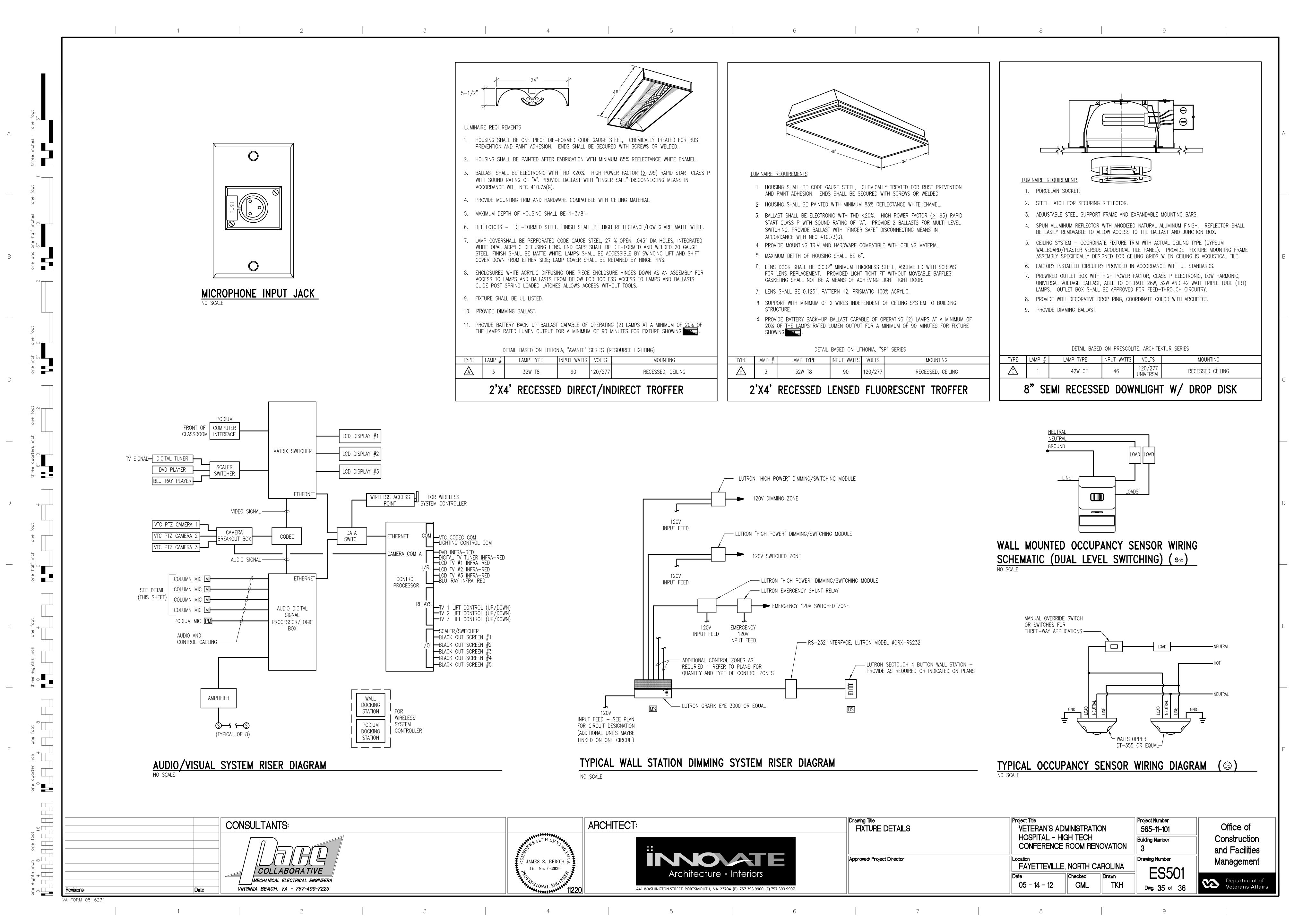
Project Title
VETERAN'S ADMINISTRATION Drawing Title
ELECTRICAL NEW WORK THIRD Project Number CONSULTANTS: ARCHITECT: Office of 565-11-101 FLOOR PLAN - POWER HOSPITAL - HIGH TECH Construction **Building Number** CONFERENCE ROOM RENOVATION and Facilities Approved: Project Director Management FAYETTEVILLE, NORTH CAROLINA Architecture • Interiors Department of Veterans Affairs MECHANICAL ELECTRICAL ENGINEERS TKH 05 - 14 - 12 GML VIRGINIA BEACH, VA - 757-499-7223 441 WASHINGTON STREET PORTSMOUTH, VA 23704 (P) 757.393.9900 (F) 757.393.9907

one eighth inch = one foot

0 4 8 16

VA FORM 08-6231





DEMOLITION PANELBOARD DEMOLITION PANELBOARD ES33 100A MLO, 208/120 VOLT, 3 PHASE, 4 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT, GROUND BUS

LOAD (AMPS)
BKR CKT PHASE CKT BKR LOAD (AMPS)
RVED A B C TRIP NO. A B C NO. TRIP A B C LOAD 100A MCB, 208/120 VOLT, 3 PHASE, 4 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT, GROUND BUS

LOAD (AMPS) BKR CKT PHASE CKT BKR LOAD (AMPS)

RVED A B C TRIP NO. A B C NO. TRIP A B C LOAD 20/1P 1 2 2 20/1P \* 2 20/1P 3 4 20/1P LTS AUDITORIUM RECEPTACLES \* RECEPTACLES RECEPTACLES RECEPTACLES RECEPTACLES

\* FLOOR RECPT PLUGMOLD PLUGMOLD FLOOR RECPT SPACE ONLY SPACE ONLY 0.0 | 0.0 | 0.0 | TOTAL CONNECTED AMPS A: 0.0 OXYGEN ALARM 303F C: 0.0 \* EXISTING UNKOWN LOAD. CONTROLS 4TH **1** FLOOR #25 SPACE ONLY SPACE ONLY SPACE ONLY SPACE ONLY PANELBOARD SPACE ONLY SPACE ONLY 100A MLO, 208/120 VOLT, 3 PHASE, 4 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT, GROUND BUS

LOAD (AMPS) BKR CKT PHASE CKT BKR LOAD (AMPS)

RVED A B C TRIP NO. A B C NO. TRIP A B C LOAD (AMPS) **LOAD SERVED**EXIT LIGTHS 0.0 | 0.0 | 0.0 EXIT LIGHTS CANOPY RECEPTACLES TOTAL CONNECTED AMPS A: 0.0 C: 0.0 RECEPTACLES \* EXISTING UNKOWN LOAD. PLUGMOLD RECEPTACLES \* FLOOR RECPT CIRCUITS SHOWN BOLD ARE TO BE REMOVED COMPLETE. PLUGMOLD FLOOR RECPT **PANELBOARD** SPACE ONLY SPACE ONLY 100A MCB, 208/120 VOLT, 3 PHASE, 4 WIRE, 10 KAIC MINIMUM, SURFACE MOUNT, GROUND BUS

LOAD (AMPS)

BKR | CKT | PHASE | CKT | BKR | LOAD (AMPS)

RVED | A | B | C | TRIP | NO. | A | B | C | LOAD TOTAL CONNECTED AMPS A: 0.0 B: 0.0 C: 0.0 20/1P 1 2 2 20/1P 1.5 20/1P 3 4 20/1P \* EXISTING UNKOWN LOAD. 4.0 ICE MACHINE
RECEPTACLES
RECEPTACLES RECEPTACLES 5.0 TELEVISIONS RECEPTACLES \* | EWC CORRIDOR PHASING NOTE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT FOR PANEL "NL" TO REMAIN \* FLOOR #25 IN SERVICE DURING DEMOLITION. PANEL SHALL REMAIN IN SERVICE UNTIL NEW PANEL "NL" IS IN PLACE TO BE ENERGIZED, COORDINATE BRANCH CIRCUIT OUTAGE WITH OWNER. SPACE ONLY SPACE ONLY SPACE ONLY SPACE ONLY 3.0 4.5 9.0 TOTAL CONNECTED AMPS A: 31.4 C: 19.5 \* EXISTING UNKOWN LOAD. —100A-3P, FU @ 100A, LOCATED IN ROOM 404 — ETR \_\_4 #3, 1 #8 GND - 1-1/4°C EXISTING PANEL ESD3 ES33 100A MCB 120/208V 3ø, 4W **DEMOLITION WORK NOTES** EXISTING PANEL 120/208V 3ø, 4W 225A MLO 100A MCB 120/208V 3ø, 4W 120/208V DEMOLISHED SHALL BE REROUTED/EXTENDED TO REVISED PANELBOARD LOCATION. RETAIN PANELBOARD AND CIRCUIT BREAKERS FOR REUSE. 3ǿ, 4W 2 └─4 #3, 1 #8 GND - 1-1/4°C BEING COMPLETELY DEMOLISHED SHALL BE REROUTED/EXTENDED TO REVISED POWER RISER DIAGRAM - DEMOLITION POWER RISER DIAGRAM - DEMOLITION PANELBOARD LOCATION. CONTRACTOR TO REMOVE FEEDER TO PANEL BACK TO SAFETY SWITCH. —100A-3P, FU @ 100A, LOCATED IN ROOM 404 - ETR \_\_4 #3, 1 #8 GND - 1-1/4°C EXISTING PANEL ESD3 EXISTING PANEL ES33 100A, MCB **EXISTING NEW WORK NOTES** PANEL 120/208V 120/208V 3ø, 4W 3ø, 4W CONTRACTOR SHALL REWORK INTERCEPT CIRCUITS RETAINED FROM DEMOLITION AND EXTEND TO PANELBOARDS REVISED LOCATION. SEE SHEET E102 FOR 225A MLO 100A MCB 120/208V 3ø, 4W 120/208V 3ø, 4W PANELBOARD LOCATION. PROVIDE JUNCTION BOXES AS REQUIRED BY NEC TO EXTEND CIRCUITING. └─4 #3, 1 #8 GND - 1-1/4"C POWER RISER DIAGRAM - NEW WORK POWER RISER DIAGRAM - NEW WORK NO SCALE Project Title Drawing Title Project Number ARCHITECT: CONSULTANTS: PANELBOARD SCHEDULES Office of **VETERAN'S ADMINISTRATION** 565-11-101 HOSPITAL - HIGH TECH AND RISER DIAGRAMS Construction **Building Number** CONFERENCE ROOM RENOVATION and Facilities Approved: Project Director Management FAYETTEVILLE, NORTH CAROLINA Architecture • Interiors Drawn ECHANICAL ELECTRICAL ENGINEERS Department of Veterans Affairs 05 - 14 - 12 TKH GML VIRGINIA BEACH, VA - 757-499-7223 441 WASHINGTON STREET PORTSMOUTH, VA 23704 (P) 757.393.9900 (F) 757.393.9907 VA FORM 08-6231